

(11) EP 1 205 173 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 10.09.2003 Bulletin 2003/37

(51) Int Cl.7: **A61J 1/00**, A61M 5/178

(43) Date of publication A2: 15.05.2002 Bulletin 2002/20

(21) Application number: 01126279.7

(22) Date of filing: 06.11.2001

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE TR

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 08.11.2000 US 246635 P

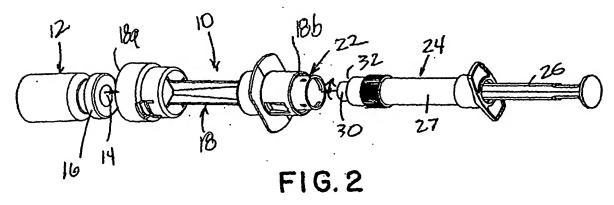
(71) Applicant: West Pharmaceutical Services, Inc. Lionville, PA 19341 (US) (72) Inventor: Norton, Paul, H. Trumbauersville, PA (US)

(74) Representative:
 Maucher, Wolfgang, Dipl.-Ing. et al
 Patent- und Rechtsanwaltssozietät,
 PA Dipl.-Ing. W. Maucher, PA und RA H.
 Börjes-Pestalozza,
 Dreikönigstrasse 13
 79102 Freiburg (DE)

(54) Safety device for a syringe assembly

(57) A syringe safety device (10) forms a fluid coupling between a sealed vial (14) and a syringe (24) and includes a tubular connector (18) having a first axial open end (18a) engaging the end of the vial (12) and a second, opposing open axial end (18b) releasably receiving a syringe (24) to use with the vial (12), the tubular connector (18) enclosing a sliding joint (22) having opposing axial ends (22a, 22b) and a passageway (56) between the ends, a first axial end (22a) configured to en-

gage an enlarged, blunt mounting end (20b) of a syringe needle (20), a second axial end (22b) configured to releasably engage at least a releasable needle receiver (30) on a distal end (32) of the syringe (24) without needle, the syringe (24) without needle being releasably removable from the sliding joint (22) after fluid coupling with the vial (14) through the passageway (56) of the sliding joint (22), without removal of the sliding joint (22) from the connector (18). The needle (20) is captured in the connector (18) with the sliding joint (22).





EUROPEAN SEARCH REPORT

Application Number EP 01 12 6279

Category	Citation of document with in of relevant passage	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Ci.7)	
X Y	WO 00 54723 A (SEDA (FR)) 21 September * page 4, line 27 -	T ;ARNISSOLLE YVES 2000 (2000-09-21) page 5, line 6 *	1-3	A61J1/00 A61M5/178
	* page 5, line 27 - * page 6, line 1 - * page 9, line 11 -	line 21 *		
Y	FR 2 717 086 A (DEB 15 September 1995 (* page 22, line 7 -	1995-09-15) line 12 *	4-6	
A	* page 24, line 19 12,13 *	- line 21; figures	11	
A	GB 2 235 135 A (INT 27 February 1991 (1 * page 7, line 33 - * page 8, line 19 -	991-02-27) page 8, line 9 *	7-9	
A	US 3 938 518 A (TIS 17 February 1976 (1 * column 2, line 35		* 10	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	US 2 326 490 A (PER 10 August 1943 (194 * page 1, right-han page 2, left-hand c	3-08-10) d column, line 44 -	12,13 res	A61J A61M
A	EP 0 417 988 A (BUL 20 March 1991 (1991 * column 9, line 48 * column 10, line 3		11 *	·
	The present search report has be	een drawn up for all claims Date of completion of the sea		Examiner
	THE HAGUE	18 July 2003		netz, C
X:parti	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoth ment of the same category notogical background	T : theory or E : earlier pat after the fill er D : document L : document	orinoiple underlying the i ent document, but publi- ing data cited in the application cited for other reasons	nvention
	-written disclosure mediate document		f the same patent family	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 01 12 6279

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

18-07-2003

Patent documer cited in search rep		Publication date		Patent fami member(s		Publication date
NO 0054723	A	21-09-2000	FR	2790948	A1	22-09-2000
			AU	3300300		04-10-2000
			EP	1161217		12-12-200
			WO	0054723		21-09-200
			JP	2002538893		19-11-200
FR 2717086	Α	15-09-1995	FR	2715311	A1	28-07-199
			FR	2717086	A1	15-09-199
			ΑU	684544	B2	18-12-199
			ΑU	7618094		27-03-199
			BR	9407390		05-11-199
			CA	2170160	A1	16-03-199
			CN	1133003		09-10-199
			DE	69412492		17-09-199
			DE	69412492		11-02-1999
			EP	0717611		26-06-1990
			ES	2122321		16-12-1998
			WO	9507066		16-03-199
			JP	9502116		04-03-1997
			JP	3325896		17-09-200
			RU	2141306		20-11-1999
			US	5827262	A	27-10-199
GB 2235135	A	27-02-1991	AU	5975490		28-02-199
			CA	2023575	A1	25-02-199
JS 3938518	A	17-02-1976	NONE			
JS 2326490	A	10-08-1943	NONE			
EP 0417988	Α	20-03-1991	US	4994029	A	19-02-199
			AT	97327	T	15-12-1993
			AU	629385		01-10-1992
			AU	6108990		21-03-199
			CA	2023921		13-03-199
			DE	69004641		23-12-1993
			DE			09-06-1994
			DK	417988		28-03-1994
			EP	0417988		20-03-199
			ES	2045820		16-01-1994
			FI	102144		30-10-1998
			HK	38794		29-04-1994
			ΙE	903140		27-03-199
			JP	3149061		25-06-199
			KR	165891		15-01-1999
			ИО		A ,B,	13-03-199

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 01 12 6279

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

18-07-2003

Patent document oited in search report	Publication date	Patent family member(s)	Publication date
EP 0417988 A	NZ SG US ZA	234986 A 13994 G 5019052 A 9006800 A	23-12-1992 10-06-1994 28-05-1991 31-07-1991

FORM POAS9

For more details about this annex: see Official Journal of the European Patent Office, No. 12/82